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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/896,888

DATE: 07/20/2001

TIME: 11:24:45

Input Set : N:\Crf3\RULE60\09296888.txt
 Output Set: N:\CRF3\07202001\I896888.raw

5 <110> APPLICANT: The University of British Columbia
 9 <120> TITLE OF INVENTION: Insect Expression
 13 <130> FILE REFERENCE: 80021-44
 15 <140> CURRENT APPLICATION NUMBER: 09/896,888
 17 <141> CURRENT FILING DATE: 2001-06-29
 19 <150> PRIOR APPLICATION NUMBER: US 09/048,911
 21 <151> PRIOR FILING DATE: 1998-03-26
 25 <150> PRIOR APPLICATION NUMBER: US 60/049,946
 27 <151> PRIOR FILING DATE: 1997-03-27
 31 <160> NUMBER OF SEQ ID NOS: 50
 35 <170> SOFTWARE: PatentIn Ver. 2.0
 39 <210> SEQ ID NO: 1
 41 <211> LENGTH: 564
 43 <212> TYPE: DNA
 45 <213> ORGANISM: Orgyia pseudotsugata
 49 <400> SEQUENCE: 1
 51 catgatgata aacaatgtat ggtgctaata ttgcttcaac aacaattctg ttgaactgtg 60
 55 ttttcatggt tgccaacaag cacttttata ctcggtggcc tccccaccac caactttttt 120
 59 gcactgcaaa aaaacacgct tttgcacgcg ggcccatata tagtacaac tctacgtttc 180
 63 gtagactatt ttacataaat agtctacacc gttgtatagc ctccaaatac actaccacac 240
 67 attgaacctt tttgcagtcg aaaaaagtag gtgtcggcag tcacgtaggc cggccttata 300
 71 gggtcgcgct ctgtcacgta cgaatcacat tatcggaccg gacgagtgtt gtcttatcgt 360
 75 gacaggacgc cagcttcctg tgttgctaac cgcagccgga cgcaactcct tatcggaaca 420
 79 ggacgcgcct ccatatcagc cgcgcgttat ctcatgcgcg tgaccggaca cgaggcgccc 480
 83 gtcccgctta tcgcgcctat aaatacagcc cgcaacgata tggtaaacac agttgaacag 540
 87 catctgttac agcgacacaa catg 564
 93 <210> SEQ ID NO: 2
 95 <211> LENGTH: 44
 97 <212> TYPE: DNA
 99 <213> ORGANISM: Orgyia pseudotsugata
 103 <400> SEQUENCE: 2
 105 ccgcggatcg atatctgact aaatcttagt ttgtattgtc atgt 44
 111 <210> SEQ ID NO: 3
 113 <211> LENGTH: 24
 115 <212> TYPE: DNA
 117 <213> ORGANISM: Orgyia pseudotsugata
 121 <400> SEQUENCE: 3
 123 cgggtgcgca cgcgcttgaa agga 24
 129 <210> SEQ ID NO: 4
 131 <211> LENGTH: 45
 133 <212> TYPE: DNA
 135 <213> ORGANISM: Artificial Sequence
 139 <220> FEATURE:
 141 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR amplifier
 145 <400> SEQUENCE: 4
 147 aatttaaacy ttggtaccct cgagctcagc tgaattctgg atcct 45
 153 <210> SEQ ID NO: 5

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155 <211> LENGTH: 45
157 <212> TYPE: DNA
159 <213> ORGANISM: Artificial Sequence
163 <220> FEATURE:
165 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR amplifier
169 <400> SEQUENCE: 5
171 ctagaaggat ccagaattca gctgagctcg aggtaccaag cttaa          45
177 <210> SEQ ID NO: 6
179 <211> LENGTH: 36
181 <212> TYPE: DNA
183 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
189 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR amplifier
193 <400> SEQUENCE: 6
195 ctagaccggt catatgcggg ccgcggatcg atcgat          36
201 <210> SEQ ID NO: 7
203 <211> LENGTH: 30
205 <212> TYPE: DNA
207 <213> ORGANISM: Artificial Sequence
211 <220> FEATURE:
213 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR amplifier
217 <400> SEQUENCE: 7
219 atcgatcgat ccgcggccgc atatgaccgt          30
225 <210> SEQ ID NO: 8
227 <211> LENGTH: 25
229 <212> TYPE: DNA
231 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
237 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
241 <400> SEQUENCE: 8
243 tcgggtgcgc acgcgcttga aagga          25
249 <210> SEQ ID NO: 9
251 <211> LENGTH: 55
253 <212> TYPE: DNA
255 <213> ORGANISM: Artificial Sequence
259 <220> FEATURE:
261 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
265 <400> SEQUENCE: 9
267 tcagctgcag atgaagaggc ctagacctat gaaaccagta acgttatatcg atgtc          55
273 <210> SEQ ID NO: 10
275 <211> LENGTH: 50
277 <212> TYPE: DNA
279 <213> ORGANISM: Artificial Sequence
283 <220> FEATURE:
285 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
289 <400> SEQUENCE: 10
291 acttaagctt atagcgatga ctgcccgtt tccagtcggg aaacctgtcg          50
297 <210> SEQ ID NO: 11
299 <211> LENGTH: 67

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301 <212> TYPE: DNA
303 <213> ORGANISM: Artificial Sequence
307 <220> FEATURE:
309 <223> OTHER INFORMATION: Description of Artificial Sequence: Bombyxin
311     secretion signal oligonucleotide fragment
315 <400> SEQUENCE: 11
317 aattatgaag atactccttg ctattgcatt aatgttgtca acagtaatgt ggggtgtcaac 60
321 aagctta 67
327 <210> SEQ ID NO: 12
329 <211> LENGTH: 67
331 <212> TYPE: DNA
333 <213> ORGANISM: Artificial Sequence
337 <220> FEATURE:
339 <223> OTHER INFORMATION: Description of Artificial Sequence: Bombyxin
341     secretion signal oligonucleotide fragment
345 <400> SEQUENCE: 12
347 ctagtaagct tgttgacacc cacattactg ttgacaacat taatgcaata gcaaggagta 60
351 tcttcat 67
357 <210> SEQ ID NO: 13
359 <211> LENGTH: 66
361 <212> TYPE: DNA
363 <213> ORGANISM: Artificial Sequence
367 <220> FEATURE:
369 <223> OTHER INFORMATION: Description of Artificial Sequence: Enhancer
371     sequence OpE
375 <400> SEQUENCE: 13
377 cctttcaagc gcgtgcgcac ccgaaaagca gggtcgcgcg tgacgcactg ctaaaaatag 60
381 cacgcg 66
387 <210> SEQ ID NO: 14
389 <211> LENGTH: 462
391 <212> TYPE: DNA
393 <213> ORGANISM: Artificial Sequence
397 <220> FEATURE:
399 <223> OTHER INFORMATION: Description of Artificial Sequence: Promoter
401     sequence of the OpMNPV ie2 gene
405 <400> SEQUENCE: 14
407 cccaccacc aacttttttg cactgcaaaa aaacacgctt ttgcacgcgg gcccatacat 60
411 agtacaaact ctacgtttcg tagactatth tacataaata gtctacaccg ttgtatacgc 120
415 tccaaataca ctaccacaca ttgaaccttt ttgcagtga aaaaagtacg tgcggcagc 180
419 cacgtaggcc ggccttatcg ggtcgcgtcc tgtcacgtac gaatcacatt atcggaccgc 240
423 acgagtgttg tcttatcgtg acaggacgcc agcttcctgt gttgctaacc gcagccggac 300
427 gcaactcctt atcggaaacag gacgcgcctc catatcagcc gcgcgttatc tcatgcgcgt 360
431 gaccggacac gaggcgcccg tcccgcttat cgcgcctata aatacagccc gcaacgatct 420
435 ggtaaacaca gttgaacagc atctgttaca gcgacacaac at 462
441 <210> SEQ ID NO: 15
443 <211> LENGTH: 88
445 <212> TYPE: DNA
447 <213> ORGANISM: Artificial Sequence
451 <220> FEATURE:

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453 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
455     promoter sequence of the AcMNPV ien gene
459 <400> SEQUENCE: 15
461 gataaattta aaatgaattt ttttgcaatg caaaaaagtt cacttttgcc tgacactcca 60
465 tatacagtac aatctctaca aatcgtag                                     88
471 <210> SEQ ID NO: 16
473 <211> LENGTH: 92
475 <212> TYPE: DNA
477 <213> ORGANISM: Artificial Sequence
481 <220> FEATURE:
483 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
485     promoter sequence of the AcMNPV ien gene
489 <400> SEQUENCE: 16
491 ctatttttatt agaatagtct aactgtacg atacgctccc aatatactac tacactatca 60
495 acttttttgc attacaaaaa agttcatttt tg                               92
501 <210> SEQ ID NO: 17
503 <211> LENGTH: 12
505 <212> TYPE: DNA
507 <213> ORGANISM: Artificial Sequence
511 <220> FEATURE:
513 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
515     the promoter sequence of the AcMNPV ien gene
519 <400> SEQUENCE: 17
521 cctggcaagt tc                                                         12
527 <210> SEQ ID NO: 18
529 <211> LENGTH: 17
531 <212> TYPE: DNA
533 <213> ORGANISM: Artificial Sequence
537 <220> FEATURE:
539 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
541     the promoter sequence of the AcMNPV ien gene
545 <400> SEQUENCE: 18
547 ccccaccact attgtct                                                  17
553 <210> SEQ ID NO: 19
555 <211> LENGTH: 16
557 <212> TYPE: DNA
559 <213> ORGANISM: Artificial Sequence
563 <220> FEATURE:
565 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
567     the promoter sequence of the AcMNPV ien gene
571 <400> SEQUENCE: 19
573 tatcagtcgt gcagta                                                  16
579 <210> SEQ ID NO: 20
581 <211> LENGTH: 50
583 <212> TYPE: DNA
585 <213> ORGANISM: Artificial Sequence
589 <220> FEATURE:
591 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
593     the promoter sequence of the AcMNPV ien gene

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597 <400> SEQUENCE: 20
599 ctgataaaca gtataaatat agctgccgtt ctactcgtaa gcacagttca          50
605 <210> SEQ ID NO: 21
607 <211> LENGTH: 25
609 <212> TYPE: DNA
611 <213> ORGANISM: Artificial Sequence
615 <220> FEATURE:
617 <223> OTHER INFORMATION: Description of Artificial Sequence: Fragment of
619     the promoter sequence of the AcMNPV ien gene
623 <400> SEQUENCE: 21
625 agcctcacag cctagtgaac agtat          25
631 <210> SEQ ID NO: 22
633 <211> LENGTH: 10
635 <212> TYPE: DNA
637 <213> ORGANISM: Artificial Sequence
641 <220> FEATURE:
643 <223> OTHER INFORMATION: Description of Artificial Sequence: IE2B promoter
645     element
649 <400> SEQUENCE: 22
651 gacaggacgc          10
657 <210> SEQ ID NO: 23
659 <211> LENGTH: 18
661 <212> TYPE: DNA
663 <213> ORGANISM: Artificial Sequence
667 <220> FEATURE:
669 <223> OTHER INFORMATION: Description of Artificial Sequence: IE2B promoter
671     element
675 <400> SEQUENCE: 23
677 cttatcgtga caggacgc          18
683 <210> SEQ ID NO: 24
685 <211> LENGTH: 10
687 <212> TYPE: DNA
689 <213> ORGANISM: Artificial Sequence
693 <220> FEATURE:
695 <223> OTHER INFORMATION: Description of Artificial Sequence: IE2B promoter
697     element
701 <400> SEQUENCE: 24
703 aacaggaagc          10
709 <210> SEQ ID NO: 25
711 <211> LENGTH: 18
713 <212> TYPE: DNA
715 <213> ORGANISM: Artificial Sequence
719 <220> FEATURE:
721 <223> OTHER INFORMATION: Description of Artificial Sequence: IE2B promoter
723     element
727 <400> SEQUENCE: 25
729 cttatcggaa caggacgc          18
735 <210> SEQ ID NO: 26
737 <211> LENGTH: 132

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VERIFICATION SUMMARY

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Input Set : N:\Crf3\RULE60\09896888.txt

Output Set: N:\CRF3\07202001\I896888.raw

L:799 M:258 W: Mandatory Feature missing, <220> FEATURE:
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L:877 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:877 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:949 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:949 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1021 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1021 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1093 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1093 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1157 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1157 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1215 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1215 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION: